

# Work Order ID 50616

July 17, 2009 11:01:00 AM



Page 1

Item ID: D205-634-041  
Revision ID: D  
Item Name: Replacement Skidtube

Accept



Setup Start



Stop



Start Date: 7/21/09 Start Qty: 1.00

Required Date: 7/30/09 Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: *W*

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D2580

Rev D

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

*W/A billed on  
W/O 51026*

110

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend I

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

*9-7-20*

# Work Order ID 50616



Page 2

July 17, 2009 11:01:00 AM

Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Stop



Item Name: Replacement Skidtube

Start Date: 7/21/09 Start Qty: 1.00



Cust Item ID:

Required Date: 7/30/09 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: Date: Tooling: Date:

Stop



QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120

0.00



Skidtubes

Memo

0.00

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

*AWM 9-7-20 (1)*

130

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

*BE 9-7-21*

# Work Order ID 50616

July 17, 2009 11:04:00 AM



Page 3

Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Stop



Item Name: Replacement Skidtube

Start Date: 7/21/09 Start Qty: 1.00



Cust Item ID:

Required Date: 7/30/09 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Weld step D2576 as per Dwg. D2580 and QSI 004  
A/R: Aluminum Rod *mill 679*

*BE 09/07/21*

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill

A/R: Aluminum Rod

*mill 679*

*BE 09/07/21*

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web. Deburr

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580. Deburr holes

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

*- AWM 9-7-22*

# Work Order ID 50616

July 17, 2009 11:01:00 AM



Page 4

Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Stop



Item Name: Replacement Skidtube

Start Date: 7/21/09 Start Qty: 1.00



Cust Item ID:

Required Date: 7/30/09 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

QC10- Inspect visual per QS1004- ground welds

0.00

=> 802/4/03

Ⓚ

Ⓚ

QC

Memo

0.00

Quality Control

160

QC5- Inspect part completeness to step on W/O

0.00

=> 802/4/03

Ⓚ

Ⓚ

QC

Memo

0.00

Quality Control

170

Pressure Wash per QS1005 4.3

0.00

Ⓚ 09-07-29

Ⓚ

HandFinish

Memo

0.00

Hand Finishing

# Work Order ID 50616

July 17, 2009 11:01:00 AM



Page 5

Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Stop



Item Name: Replacement Skidtube

Start Date: 7/21/09 Start Qty: 1.00



Cust Item ID:

Required Date: 7/30/09 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:  
OVEN TEMPERATURE:  
FINISH TIME:

10:30AM  
320°F  
11:00AM

M112148 09-07-29

(X1)

JH

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

BR 09-07-30

(P)

# Work Order ID 50616



Page 6

July 17, 2009 11:01:00 AM

Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Stop



Item Name: Replacement Skidtube

Start Date: 7/21/09 Start Qty: 1.00



Cust Item ID:

Required Date: 7/30/09 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

200

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates  
A/R [ ] [ ] [ ] Sikaflex-291 M 111557.  
Sikaflex expire date: 10/01

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive  
A/R [ ] [ ] [ ] Sikaflex-291 M 111557  
Sikaflex expire date: 10/01

5-Wing Walk as per Dwg D2580 and QSI 005 4.4  
Batch: M 111013.

for 09-07-30

# Work Order ID 50616

July 17, 2009 11:01:00 AM

Page 7

Item ID: D205-634-041  
Revision ID: D  
Item Name: Replacement Skidtube

Accept

Setup Start

Stop

Start Date: 7/21/09 Start Qty: 1.00

Required Date: 7/30/09 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

210

QC5- Inspect part completeness to step on W/O

0.00



QC

Quality Control

Memo

0.00

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

⇒ 50107130 (10) φ

220

Packaging

0.00



Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPPD205-634-041

Location:

PPP Rev:

PPP 51026

209/7/31 (1)

230

QC21- Final Inspection - Work Order Release

0.00



QC

Quality Control

Memo

0.00

1/05/08 04  
A

W. G. Boy

# Picklist Print

July 17, 2009 11:00:59 AM

Page 1

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2580-1RevD

Manufactured

No

110

Each

3.0000

1.0000



205 Skidtube bent detail

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

48616

3

3

140

Each

168.0000

1.0000

D2576-3RevG

Manufactured

No



Step (maching detail)

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

43504 ✓

46661

168

65

103

140

Each

532.0000

20.0000

D2579RevE

Manufactured

No



Crossbolt Spacer

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

43988

46434

46956 ✓

47797

48272

532

4

4

32

438

54

DP 9-7-20

①

1 DE 09/02/20

AW 9-7-20-20



# Picklist Print

July 17, 2009 11:00:59 AM

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube


Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2855RevA		Manufactured	No			200	Each	15.0000	1.0000			
												
Cap												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

10360

35663

41340

42343

42806

15

2

7

1

3

2

200

Each

2,564.000

2.0000

AN3-5A

Bolt

Purchased

No

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

100188

105057

15205

2564

246

2246

72

M 111 707

2

BR 09-07-30.

# Picklist Print

July 17, 2009 11:00:59 AM

Page 3

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD10L		Purchased	No			200	Each	7,089.000	2.0000			



Washer

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	7173	
101291	16	
104885	153	
105793	236	
109632 ✓	1768	
110985	5000	

Main Warehouse

ST182	-84	
109632	-84	

ALS7-1032-130

Purchased

No

200

Each

3,850.000 50.0000



Insert

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	3850	
108606	52	
111529	1798	
111779	2000	

m 110511

2 Bk 09-07-30

50. Bk 09-07-30

July 17, 2009 11:00:59 AM

Shop Packet Print

Page 3

# Picklist Print

July 17, 2009 11:00:59 AM

Page 4

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube



Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00



Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3C4A 		Purchased	No			200	Each	230.0000	50.0000			
BOLT												

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse      *m 112314*  
ST                      230  
112082                      230

*50. B/L 09-07-30*

AN960C10L 		Purchased	No			200	Each	4,824.000	50.0000			
washer												

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse  
ST                      4824  
103585                      100  
112116 ✓                      4724

*50 B/L 09-07-30*

July 17, 2009 11:00:59 AM

Shop Packet Print

Page 4

# Picklist Print

July 17, 2009 11:00:59 AM

Page 5

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube


Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-13RevC		Manufactured	No			200	Each	32.0000	1.0000			
												
Gasket												

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

FP17                      -1

46889                      -1

Main Warehouse

ST                      33

45717                      1

46889                      6

47435 ✓                      8

48166                      18

*Bl 04-07-30,*

D3566-5RevC

Manufactured No

200

Each

23.0000

1.0000



Gasket



Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST                      23

36113                      1

46186                      1

47318                      1

48167 ✓                      20

*Bl 04-07-30*

July 17, 2009 11:00:59 AM

Shop Packet Print

Page 5

# Picklist Print

July 17, 2009 11:00:59 AM

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3566-1RevC

Manufactured

No

200

Each

24.0000

2.0000



Gasket

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

24

46349

1

47434

2

48165 ✓

10

48557

11

D3564-11RevD

Manufactured

No

200

Each

21.0000

1.0000



Wearshoe

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

21

45823

1

47432 ✓

8

48553

12

2 BR 07-07-30.

1 BR 07-07-30

# Picklist Print

July 17, 2009 11:00:59 AM

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube


Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-13RevD		Manufactured	No			200	Each	34.0000	1.0000			
												
Wearshoe												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP17

13

48554

13

Main Warehouse

ST

21

45409

3

46495

10

47867✓

8

D3564-9RevD

Manufactured

No

200

Each

18.0000

1.0000



Wearshoe

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

18

44659

1

45825

1

47316✓

4

48556

12

1 BL 09-07-30.

1 BL 04-07-30

# Picklist Print

July 17, 2009 11:00:59 AM

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3564-5RevD

Manufactured

No

200

Each

23.0000

1.0000



Wearshoe

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

2

34806

2

Main Warehouse

FP19

12

48555

12

Main Warehouse

ST

9

45824

1

47433

1

48164 ✓

7

D2594-3RevC

Manufactured

No

200

Each

932.0000

16.0000



O-Ring, 205 Skidtube

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

932

27168

44

29908 ✓

888

1 BR 09-07-30

16 BR 09-07-30

# Picklist Print

July 17, 2009 11:00:59 AM

Work Order ID: 50616

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/21/09

Required Date: 7/30/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2594-1RevC		Manufactured	No			200	Each	726.0000	16.0000			



Plug, 205 Skidtube

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	726	
42221	16	
42807	92	
43884 ✓	113	
46435	3	
47251	502	

16 BR 09-07-30.



**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

**RELEASED**  
07-06-28 *[Signature]*

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

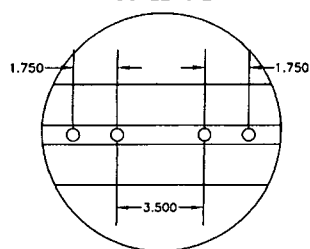
**GENERAL NOTES:**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:  
SEE NOTES ON  
PAGE 2 FOR D2580-041 AND  
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

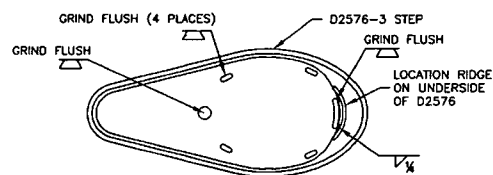
*sub 50666***Copyright © 1996 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DETAIL A**  
SCALE 5:24

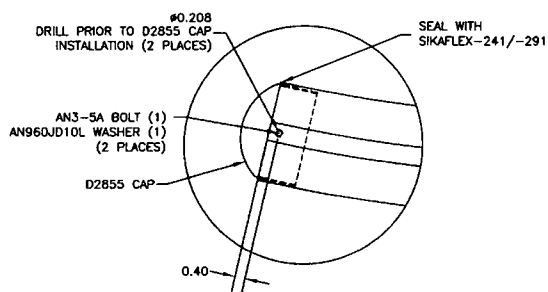


**DETAIL B**  
SCALE 5:24

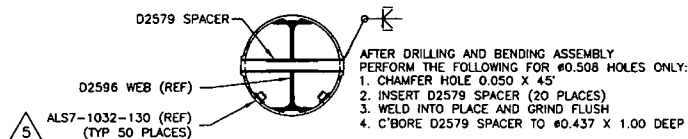


**RELEASED**  
07 de 28

**DETAIL C**  
SCALE 5:24

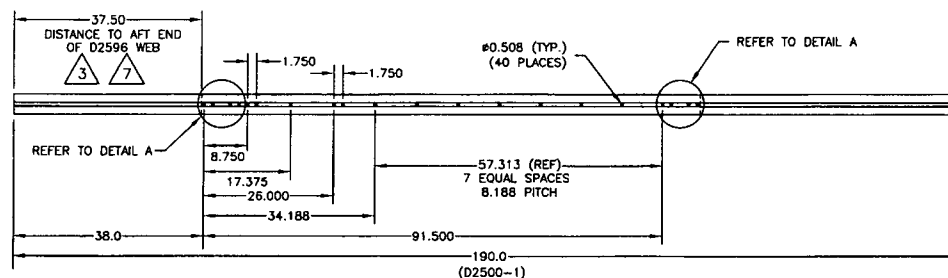


**SECTION D-D**  
SCALE 5:24

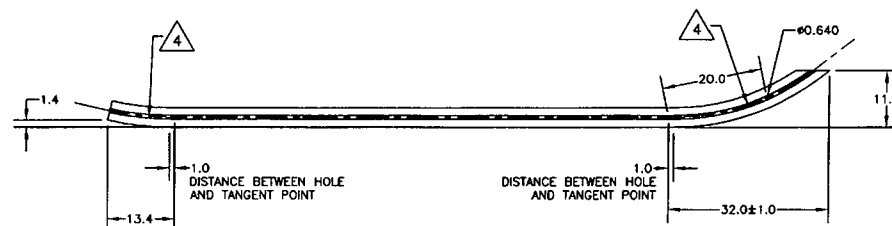


91905 0/M

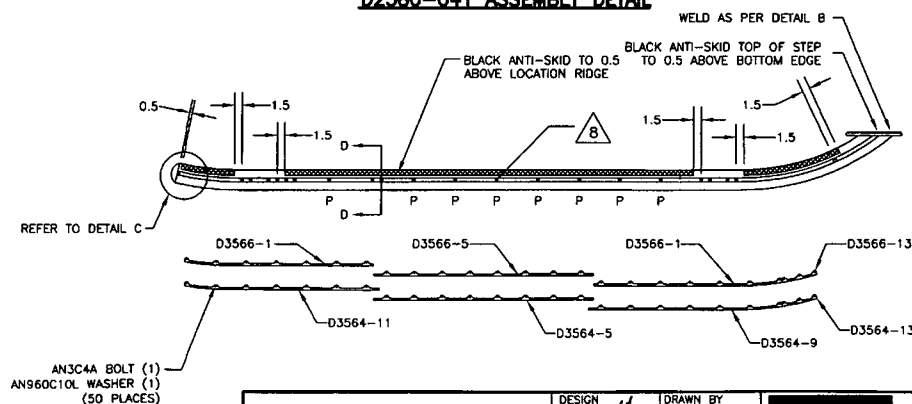
**D2580-1 DRILLING DETAIL**



**D2580-1 BENDING AND CUTTING DETAIL**



**D2580-041 ASSEMBLY DETAIL**



**D2580-041 NOTES**

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB  
POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

COPYRIGHT © 1996 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DESIGN	DRAWN BY	<b>DART</b>	DART AEROSPACE LTD. HARRISBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.	REV. 0
DATE	07.02.27	D2580	SHEET 2 OF 3
		TITLE	SCALE
		205 SKIDTUBE ASSEMBLY	1:24

Diagram of a circular cross-section of a pipe with four vertical stiffeners. The stiffeners are spaced 3.500 units apart. The distance from the centerline to the outer edge of the stiffeners is 1.750 units.

RELEASED  
07 Dec 28

Diagram illustrating the grinding locations and features on the propeller cross-section:

- GRIND FLUSH (4 PLACES)
- GRIND FLUSH
- D2576-3 STEP
- LOCATION RIDGE ON UNDERSIDE OF D2576
- GRIND FLUSH

Diagram illustrating the rear view of the engine cover assembly. The diagram shows the installation of the AN3-5A bolt (1), AN960JD10L washer (1), and D2855 cap. The bolt is secured with a washer and cap. The cap is sealed with SIKAFLEX-241/-291. A dimension of 0.40 is indicated for the distance from the center of the bolt to the edge of the cover.

D2579 SPACER

D2596 WEB (REF)

AL57-1032-130 (REF)  
(TYP 50 PLACES)

5

AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C/BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

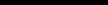
37.50  
DISTANCE TO AFT END  
OF D2598 WEB  
3 7  
1.750 1.750  
#0.508 (TYP.)  
(40 PLACES)  
REFER TO DETAIL E  
REFER TO DETAIL A  
8.750  
17.375  
26.000  
34.188  
57.313 (REF)  
7 EQUAL SPACES  
8.188 PITCH  
38.0  
91.500  
190.0  
(D2500-1)

(MAKE FROM D2580-1 DRILLING DETAIL)

Technical drawing of a curved pipe section. Dimensions and callouts include:

- Overall length: 51.340
- Distance from left end to first hole: 5.985
- Distance between holes: 5.338 (REF)
- Distance from second hole to end of curve: 39.580
- Distance from end of curve to right end: 5.915
- Hole diameter:  $\phi 0.508$  (8 PLACES)
- Radius of curve:  $\phi 0.640$
- Angle of curve: 20.0°
- Distance between hole and tangent point (left): 1.0
- Distance between hole and tangent point (right): 1.0
- Overall distance between tangent points: 32.0 ± 1.0
- Left end offset: 1.4
- Right end offset: 1.1
- Callout 4: Points to the left end, the curve, and the right end.

[illegible]

COPYRIGHT © 1996 BY DART AEROSPACE LTD.  THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	DESIGN	DRAWN BY	 <b>DART AEROSPACE LTD.</b> HARRISBURY, ONTARIO, CANADA	
	CHECKED <i>RH</i>	APPROVED <i>RH</i>	DRAWING NO.	REV. 0
	DATE			SHEET 3 OF 3
07.02.27			D2580  TITLE 205 SKIDTUBE ASSEMBLY	SCALE 1:24

NO. 202

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Berclay Elliott  
Job number: 48448A  
Part number: D805634 041  
Description: 205 skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminium  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual:  
Penetration:

pass[☒] fail[ ]  
pass[☒] fail[ ]

UNACCEPTABLE

Cracks:  
Undercut:  
Pin holes:  
Overlap (cold lap)  
Porosity (surface):  
Coloration:

pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]

REFERENCE ONLY

Qualifier Vol. Dal Date of Test Coupon 09-06-17  
Welder Berclay Elliott Date of Test Coupon 09-06-17

The above named individual is qualified in accordance with AWS D17.1.2001 to weld